Index to Volume LXIX

July to December

1932

Electrical West

Published by McGraw-Hill Company of California
San Francisco, California

TK1
.E495

Index to Volume LXIX

Illustrated articles are designated by an asterisk (*), editorials by a dagger (†).

PAGES BY ISSUES

July 1-50
August 51-90
September 91-130
October.....131-178
November.....179-218
December.....219-258

A

Air Conditioning:
Industry Needs Organization, †181.
Sell Air Conditioning—It's Being Done, *148.
Spokane Educational Exhibit, *166.
Airports:
Careful Planning Buys Adequacy at Low Cost, by W. J. Delehanty, *190.
American Institute of Electrical Engineers:
Broader Opportunities for, †52.
Electrical Dictionary Out for Review, 207.
Ohio Brass Co. Entertains at Convention, *78.
Review of Vancouver Convention, *162.
Sections Install Officers, *86.
To Convene at Vancouver, *84.
Arizona Edison Co.:
Receiver Cuts Operating Costs, 205.
Armored Cable: (See Cable.)
Arrow-Hart & Hegeman:
Dissolved by Trade Commission, 126.
Association of Electragists-International: (See Electragists)

B

Ballard, Russell H.:
An Appreciation, †118.
Ballard, Russell H., Dies, *118.
Bauer, Harry J.:
Named Edison Co. Board Chairman, *211.
Be Prepared for Business Recovery, †132.
Books, New:
American Electricians' Handbook, by Terrell Croft, 111.
Electrical Laboratory Studies, by Walter Lyman Upson, 21.
Electric Power Equipment, by J. G. Tarboux, 111.
Elements of Electrical Design, by Alfred Still, 199.
First Principles of Television, by A. Dinsdale, 159.
House Design, Construction and Equipment, by President's Conference on Home Building and Home Ownership, 159.
The National Electrical Code Handbook, by Arthur L. Abbott, 25.
Bridge:
Make the Fad Useful, 61.
Brooders:
Remarkable Results From New-Type Chick Brooders, by J. C. Scott, *238.
Busch Washer Co.:
Carry Washer Sales Right to the Home, *144.
Buzzell Electric Co.:
Industrial Exhibit, *30.

C

Cable:
First Submarine Oil-Filled Cable in the U.S., by E. F. Pearson, G. B. Shanklin, W. R. Bullard and S. B. Clark, *182.
Strengthened Armored Cable Standards, 227.
California:
Commission Cites Utility Earnings 207.
Consider Revision of Lien Law, 213.
Results of Elections, 244.
Safety Orders Revised, by G. E. Kimball, 32.
California Oregon Power Co.:
Commission Investigates, 79.
Central Public Service Corp.:
Acquisition of Pacific Northwest Public Service Co. Investigated. 204.
Reorganizes, 120.
Stockholders' Suit Filed, 120.
Chimes Ring in Customers and Prospects, 116.
Christmas:
Decorative Lighting Needed, †221.
N.E.L.A. Rocky Mountain Division Starts Annual Campaign, 205.
Circuit Breakers: (See Oil Circuit Breakers.)
Coast Counties Gas & Electric Co.:
Involved in Pacific Public Service—P. G. and E. Deal, 78.
Rate Reduction Ordered, 246.
Colorado:
Commission Sets Precedent, 119.
Colorado River Aqueduct: (See Metropolitan Water District.)
Contractors:
California to Regulate Bid Peddling, 81.
Glendale, Calif., Passes Ordinance, 254.
San Francisco Revamps Ordinance, 42.
Seattle Adopts New Electrical Code, 43.
Seattle Seeks Boost in Permit Fees, 125.
3-Phase, 4-Wire Costs Analyzed, by R. E. Lloyd, *224.
Coulee Dam:
Army Engineer Reports on, 38.
Criticism May Be Turned to Good Advantage, †53.

D

Dealer Financing:
Financing the Small Dealer, *142.
The Dealers' Way Out, *132.
Dealer-Power Company Merchandising: (See Merchandising, Power Company-Dealer.)
Dealers' Way Out, The, †132.
Deceleration: Photography Aids in Tests, by A. D. Irion, *99.
Denver:
A.E.I. Reduces Wage Scale, 43.
New Code Effective in January, 254.
Denver Theater:
Lighting, *22.
Diablo Dam: (See Seattle City Light.)
Diesel Power:
Vs. Motor Costs on Rural Schedules, 70.
Distribution:
Analyzing, Reducing and Correcting Losses, by P. P. Ashworth and E. W. Hempel, *96.
Downing, P. M.:
Heads National Sales Section, *123.

E

Eastern Outfitting Building, *66.
Electragists:
Reduce Denver Wage Scale, 43.
Plan Policy-Making Convention, 173.
Return to N.E.C.A. Designation, 213.
San Francisco Chapter Reduces Dues, 254.
Electric Air Heating:
Award in Name Contest, 34.
"Heatricity" Wins $100 Prize, 119.
Electric Appliances:
Cultivate Your Old Customers, 237.
Do You Build Salesmen—Or Bully Them?, *235.
If You Need a Cheap Leader, Make It Non-Electrical, *237.
Take an Interest in Your Customers, *200.
Sales Contest Ends in an Outing, *201.
Electric Bond & Share Co.:
Commission Halts Payment of Northwestern Service Fee, 166.
Northwestern Electric Service Contract Investigated by Oregon Commission, 36.
Electric Ferries:
Across Sacramento River, by L. O. B. Lindstrom, *76.
Letter by J. G. Taylor, *165.
Electric Heating: (See Electric Air Heating)
Electric Lamps:
Fable Exploded in Test, *60.
Electrical League of Colorado:
Stages Picnic, 122.
Electrical League of Utah:
Trade Terms Given Events at Picnic, 122.
Electric Ranges:
Asleep at the Switch?, †2.
Be It Ever So Humble, *154.
Enter the Movies, *80.
First Five Hundred Are the Hardest, *234.
Load-Building Campaign With High-Speed Units, by F. D. Luse, *146.
Moving the Range to Mahomet, *155.
P. G. and E. Exceeds Spring Campaign Quota, 80.
P. G. and E. Rings the Bell, *138.
The Industry Organizes to Sell One Million, *157.
Electric Refrigeration:
Child Draws Crowds With His Crayons, 200.
Even Snow in June Can't Stop Them, *140.
"Frozen Music" Attracts, *38.
Public Service Co. of Colo. Bargain Basement, *141.
Silverton, Colo., Emerges From Snow, *79.
Electric Refrigeration Bureau:
Sponsors Window Contest, 255.
Electric Washers:
An Attractive Store Is a Sales Aid, *202
Carry Washer Sales Right to the Home, *144.
No Protected Prospects for Salesmen, 145.
Electric Water Heaters: (See Electric Ranges.)
Electric Wiring: (See also Wiring and Range Wiring.)
Eastern Outfitting Building, *66.
What to Tell the Architect, by C. A. Rowley, 67.
Electricity Goes on the Gridiron, *195.
Electrotrim:
Given Interim Code Approval, 87.
Employment:
P. G. and E. Rings the Bell, *138.
Retention Vs. Lay-off, †93.
Engineering Unit Costs and Their Control, by L. J. Moore, *18.
Examinations:
Errors in Electrical, 24.
Additional Errors in, 105.
Exceptions, Let's All be, *53.
Exhibit, Industrial:
Buzzell Electric Co., *30.
Expositions: (See Fairs and Pacific Gas and Electric Co.)

F

Fairs:
Red Seal Wiring Exhibit at California State Fair, *159, *277.
Sell Electrification by Showing It, *112.
Farm, Electricity on the:
Diesel vs. Motor Costs, 70.
Federal Power Commission:
Holding Company Report in Press, 120.
Federal Regulation Appears Inevitable, †91.
Will Regulate Securities for Portland General Electric Co., 204.
Federal Trade Commission:
Arrow-Hart & Hegeman Ordered Dissolved, 126.
Fiber Underfloor Duct Aids Building Planning, by R. C. Mixer, *192.
Financing: (See Dealer Financing.)
First Aid:
Public Service Co. of Colo. Girls' Team Wins, 38.
Fixtures:
Swivel-Joint Bushing as an Aid, *194.
Floodlighting:
Beverly Hills City Hall, *44.
Steamer Stack Illuminated, *120.
Fort Collins Votes Municipal Power, 168.
Frigidaire Corp. Buys Meterice Firm, 255.

G

Garden Lighting:
Outdoor Living Rooms, *115.
General Electric Co.:
All-Electric Kitchen, *61.
Launches Employee Campaign, 38.

Glendale:
Passes Contractors' Ordinance, 254.
Gold Bricks Reappear With New Trimmings, †180.

H

Home Service:
Be It Ever So Humble, *154.
Hoover Dam: (See also Metropolitan Water District.)
Babcock & Wilcox Gets Pipe Contract, 79.
Bids Called on Turbines, 207.
Electric Cableways Shipped, 207,
Year Ahead of Schedule, *244.
Hubbard & Co.:
Gets Ohio Brass Hardware Line, 87.

I

Illuminating Engineering Society:
S. F. Chapter Meets at Stanford U., 44.
Industry Looks at the Future, *134.
Inland Power & Light Co.:
Investigation of Ariel Costs Started, 245.
Inspection:
Voluntary Suburban Will Help, by Arthur Kempston, 107.
Insull,Samuel:
Resigns, 35.
International Association of Electrical Inspectors:
A Bigger Job Ahead, †91.
Northwestern Section to Consider Code Changes, *124.
Northwestern Section Convenes at Wenatchee, *173.
Southern Chapter Economizes at Convention, *124.
Southwestern Section Petitions Underwriters, 172.
Irrigation:
Automatic Control Features Pumping System, *198.
Portable Unit for Farm Pumping Use, by W. R. Newmyer, *242.

J

Joslyn's Electric Shop:
Individuality of Store Display, *29.

K

Kitchen, All-Electric:
First G. E. in West, *61.
G.E. Fleet of Kitchen Coaches, *204.

L

Lamps: (See also Lighting.)
Fable Exploded in Test, *60.
General Electric Develops Bi-Post Type, *255.
Gold Bricks Reappear With New Trimmings, †180.
Letters to the Editor:
Electric Ferry, by J. G. Taylor, *165.
Electric Fish Screen, by J. O. Case, 33.
Errors in an Article, by J. P. Surratt, 165.
Forests and Stream Flow, by W. G. Hoyt, 117.
Lighting Booklets, by S. B. Williams, 33.
Dealer Financing, by Robson J. Hilgedick, 203.
On Inspectors, by H. B. Kirkland, 203.
Sales Policies, by C. F. Backstrand, 33.
Lighting: (See also Sports Lighting, Floodlighting, Garden Lighting, Street Lighting.)
Christmas Needs Cheer of Decorative Lighting, †221.
Dark Stores—Light Sales, †3.
Denver Theater, *22.
G. E. Engineers Progress on New Light Source, 121.
Is Lighting Neglected?, by Victor W. Hartley, *147.
Lamp Fable Exploded, *60.
N.E.L.A. Booklet Shows Value of Campaigns, *35.
Programs for P.C.E.A. Schools, 170.
P.C.E.A. Schools Fulfill Promise, *210.
Schools Spotlight Commercial Value of Light, †220.
Socket Heating Data, *25.
Spokane School, by Ladner V. Ross, *62.
Stage Flexibility Applied to Windows, *236.
Two Schools Planned for October, 122.
Load Building:
Campaign With High-Speed Range Units, by F. D. Luse, *146.
Cutting Dealers in on Profits, by H. A. Gardner, *152.
Industry Interdependence in, †131.
Long Beach Auditorium:
One Stage Serves Two Theaters, by D. S. Bowman, *102.
Los Angeles Bureau of Power and Light:
Bouquet Canyon Construction Camp, *39.
Calls Bids on Wilmington Plant, 35.
Cooperative Range Campaign, †234.
Edison Agreement Benefits Public, †219.
Hearing of Right-of-Way Suit, 78.
Injunction on Wilmington Plant, 120.
Moving the Range to Mahomet, *155.
Offered Power Contract by Edison Co., 35.
Opens New Hollywood Office, *206.
Proceeds With Wilmington Construction, 79.
Receives Power Offer From Edison Co., 167.
Re-employs Burdette Moody, 79.
Signs Edison Co. Contract, Abandons Wilmington Plant, 246.
Work Proceeds on Wilmington Plant, 207.
Los Angeles Gas and Electric Corp.:
Announces Employee Pension Plan, 168.

M

Management, Utility—A Three-Phase Problem, by F. B. Lewis, 54.
Merchandising Ideas From Yakima, *116.
Merchandising, Power Company-Dealer:
Cutting Dealers in on Load-Building Profits, by H. A. Gardner, *152.
Trade Relations Is a Human Problem, by F. M. Banks, 156.
San Joaquin Dealer Service Plan, by H. H. Courtright and E. G. Stahl, *151.
Meter Card, Backstrand Bros.', *32.
Meterice Firm Bought by Frigidaire Corp., 255.
Meters and Metering:
Studies Can Pay Dividends, by J. P. Surratt, *68.
Metropolitan Water District:
Applies for R.F.C. Loan, 37.
Bond Issue Upheld by Court, 37.
Engineers' Report on Power Contracts, 37.
$40,000,000 Loan From R.F.C., 167.
Initial Contracts Awarded, 246.
Lets Aqueduct Power Contract to Three Companies, 79.
Prevailing Wage Scale Adopted, 205.
Specifications Published on Aqueduct Project, 204.
Mission Inn:
Is Red Seal, *106.
Modernization:
Home Is a Logical Market, †179.
Industry Should Lead in Industrial, †179.
Moon, Verne:
Goes to Middle West Utilities Co., *170.
Motor Forum:
And Now—The Dealer, by Frank E. Boyd, 196.
Another Test for Rewound Stators, *243.
Automatic Control Features Irrigation Pumping System, 198.
Concluding Specifically, by Frank E. Boyd, *240.
California Electric Works Service Truck, *77
Electricity Drives an Auto Ferry, by L. O. B. Lindstrom, *76.
Placed Shots Bring Results, *160.
Portable Unit for Farm Pumping Use, by W. R. Newmyer, *242.
Small Shop Modernized, 77.
Solution of Mine Pumping Problem, 199.
The High Cost of Selling, by Frank E. Boyd, 109.
Workbench at Buzzell Electric Works, *77.
Mountain States Power Co.:
Commission Investigates, 79.

N

National Electric Cookery Council:
Asleep at the Switch?, †2.
Divisional Directors Appointed, *127.
The Industry Organizes to Sell One Million Ranges, *157.
National Electric Light Association:
Convention as Seen by Seven Pacific Coast Executives, *16.
Frankness in Rocky Mountain Division Meeting, *169.
Pacific Coast Speakers Win, 37.
P. M. Downing Heads National Sales Section, *123.
National Electric Code:
Revised Ruling on Wiring Fixtures, *25.
National Electrical Wholesalers' Association:
Pacific Division Meets at Del Monte, 214.
Northwest Electric Light & Power Association:
Committees Chosen, *252.
Northwestern Electric Co.:
Comments of "Oregon Voter," 166.
Commission Halts Payment of Service Fee, 166.
Crossing the Columbia at 115 Kv., by E. F. Pearson, G. B. Shanklin, W. R. Bullard and S. B. Clark, *182.
Halts Rate Cut With Injunction, 245.
Makes Commercial Lighting Survey, *147.
Maps Speed Underground Work, *21.
Rates Investigated by Oregon Commission, 36.
Rate Reduction Ordered, 120.

O

Oil Circuit Breakers:
Problems and Economies of Rebuilt, by R. E. Rowley, Jr., *231.
Olympic Games:
Electrified Olympiad Breaks Timing Records, by R. E. Lloyd, 107.
Swimming Pool Lighting, *36.
Oregon:
Commission Approves Hood River Utility District, 35.
Commission Hears Northwestern Rate Case, 36.
Commission Investigates Byllesby Properties, 79.
Commissioner Investigates Pacific Northwest Public Service Co., 204.
Commission Reduces Northwestern Electric Rates, 120.
Investigation of Ariel Project Started, 245.
Legislative Committee Studies Municipal Utility Tax, 247.
Municipal Power System Urged for Portland, 168.
State Grange Proposes Power Amendment, 79.
Tillamook Utility District Created, 119.
Tillamook Utility District Illegal, 168.
Utilities Commissioner Rejects Holding-Operating Company Fee, 166.
Utility Districts Defeated, 244.
Water Power Amendment Passes, 244.
Oregon Committee on the Relation of Electricity to Agriculture:
Studies New Applications, 44.

P

Pacific Coast Electrical Association:
Accounting Section Meeting, 8.
Address of B. F. Weadock, 12.
Address by H. C. Newton, 13.
Advertising-Publicity Section, 9.
Coast Counties Wins Day Trophy, *14.
Commercial Section Reports, 8-9.
Commercial Section Skit, 15.
Convention, †1.
Commercial Section to War on Rackets, 208.
Commercial Section Work Outlined, 248.
Demonstration by Dr. Manning, *7.
Dr. Baxter's Address, 6.
Dr. Kersey's Address, 6.
Engineering Section Committee Reports, *209.
Engineering Section Program, *10-11.
Engineering Section Concentrates on Operating Problems, 209.
F. B. Lewis on Utility Management, *12.
"For Business and Inspiration," 5.
Four Industrial Leaders Speak, *6.
Golf Tournament, 15.
Inspiration, Courage and Leadership, 4.
J. P. Coghlan Praises Management, 13.
Lighting Schools Fulfill Promise, *210.
Lighting Schools Spotlight Commercial Value of Light, †220..
Officers and Personnel, 1932-33, *248.
Programs for Lighting Schools, 170.
President Day's Address, *5.
Purchasing and Stores Section Actions, 11.
R. E. Fisher Elected President, *5.
Transportation Section Meeting, 11.
Two Lighting Schools Planned for October, 122.
W. E. Houghton on "Trends," 12.

Pacific Coast Electrical Association: (continued)
Women's Committee Presents Play, 14.
Women's Committee Round Table, 11.
Pacific Coast Electrical Bureau:
Clark Baker Becomes Light Counselor, *253.
Is Lighting Neglected?, by Victor W. Hartley, *147.
Red Seal Contest Winners, 80.
Red Seal Wiring Exhibit, *159, *227.
Will Hold Meeting at P. G. and E. Exposition, 247.
Pacific Gas and Electric Co.:
Calls Off Public Service Company Purchase, 245.
Commission Denies Rate Cut, 246.
Even Snow in June Can't Stop Them, *140.
Exceeds Quota in Spring Range Campaign, 80.
Experiments With Portable Range Wiring, *65.
Exposition Extended, 247.
Negotiate for Pacific Public Service Purchase, 78.
Plans Home Appliance Exposition, 206.
Prepares for San Joaquin Merger, 78.
Rings the Bell, *138.
Sell Electrification by Showing it at the Fair, *112.
Supervisory Control for 220-Kv. Station, *228.
Window Display System, *58.
Pacific Lighting Corp.:
Announces Employee Pension Plan, 168.
Pacific Northwest Public Service Co.:
Commission Halts Payment of Service Fee, 166.
Financial Transactions Investigated, 204.
Pacific Public Service Co.:
Offered for Sale to P. G. and E., 78.
Railroad Commission Stipulates Conditions for P. G. and E. Sale, 245.
Pasadena, City of:
Petitions to Stop Selling Lamps at Cost, 37.
Photography:
Aids in Deceleration Tests, by A. D. Irion, *99.
Portland: (See Oregon.)
Portland General Electric Co.:
Cable Across Willamette River, *73.
Power Company-Dealer Merchandising: (See Merchandising, Power Company-Dealer.)
Power Factor:
Cutting Costs by Raising, by Earl E. Thomas, *108.
Price Wars:
Come Back—All Is Forgiven, †219.
Rackets Must Not Wreck Industry Solidarity, †92.
The First Price Has Been Raised, †3.
Prosperity, Wishing Won't Bring Back, †52.
Public Ownership:
California Grange Asks Condemnation Privilege, 119.
First Oregon Utility District Created, 119.
Fort Collins Votes Municipal Power, 168.
Municipal Power System Urged for Portland, 168.
Oregon Water Power Amendment Passes, 244.
Spokane Power District Plan Blocked, 119.
Tillamook Utility District Illegal, 168.
Public Service Co. of Colo:
Bargain Refrigerator Basement, *141.
First Salary Cut, 37.
Girl First-Aid Team Wins Contest, 38
Puget Sound Electrical Wholesalers' Assn.:
Organize, 126.
Puget Sound Power & Light Co.:
Conductors Selected for Heat- Radiating Ability, 101.
Cutting Dealers in on Load-Building Profits, by H. A. Gardner, *152.
Dolly-Truck Facilitates Transformer Movement, *21.
Fights Seattle Occupation Tax, 79.
Remarkable Results From New-Type Chick Brooders, by J. C. Scott, *238.
Tacoma Denies Power Service Moratorium, 35.
Pumping: (Also see Irrigation)
Solution of Mine Pumping Problem, 199.

R

Rackets Must Not Wreck Industry Solidarity, †92.
Radio Interference:
Problems Treated Individually, *72.
Range Wiring:
Stockton Experiments With Portable, *65.
Rates:
As Viewed by the Consumer, by Louis F. Leurey, 56.
California Commission Refuses P. G. and E. Rate Cut, 246.
Coast Counties Reduction Ordered, 246.
Northwestern Electric Halts Rate Cut With Injunction, 245.
Rate Trends and Tax Trends, by John P. Coghlan, 94.
Reduction Ordered in Northwestern Electric Case, 120.
San Joaquin Proposes Lower Rates for Winter, 168.
San Joaquin Rehearing Denied, 34.
Reconstruction Finance Corp.:
Aids Metropolitan Water District, 167.
Approves Loan for San Francisco Bay Bridge, 205.
Metropolitan Water District Asks Loan, 37.
Refuses Seattle Loan, 167.
Sacramento Utility District Asks Loan, 121.
West Bids for Large Loan, 78.
Red Seal:
Can Wiring Be Sold?, by A. E. Holloway, *158.
Famed Mission Inn Is, *106.
P.C.E.B. Contest Winners Announced, 80.
Wiring Exhibit at California State Fair, *159.
Wiring Exhibit at California State Fair, *227.
Refrigeration Bureau of Southern California:
Even Snow in June Can't Stop Them, *140.
Regulation:
Appears Inevitable, †91.
Rehabilitation, Committee on Industrial:
Announce Organization, 166.
Industry Should Lead in Industrial Modernization, †179.
$600 Millions for Western Prosperity, †221.
Western Expenditures to Exceed Half Billion, 245.
Research:
An Opportunity for an Investment, †220.
Roosevelt, Gov. Franklin D.:
Defines Power Stand at Portland, 168.
Rumors, Squelch the Carrier of Harmful, †93.
Rural Electrification: (See Farm, Electricity on the)

S

Sacramento:
Installation at New Airport, by W. J. Delehanty, *190.
Safety Orders, California:
Revised, by G. E. Kimball, 32.
Sales:
Self-Interest in, †52.
Utah Power & Light Contest Ends in an Outing, *201.
Salesmen:
Do You Build or Bully Them?, *235.
San Francisco Electrical Development League:
Holds Night Golf Tourney, *122.
San Francisco War Memorial Opened, *245.
San Joaquin Light & Power Corp.:
Employees' Tip Plan, by E. G. Stahl, *151.
Protests Rate Reduction, 78.
Proposes Lower Rates, 168.
Scoreboards:
Electricity Goes on the Gridiron, *195.
Seattle, City of:
Adopts New Electrical Code, 43.
Campaigns for "Home Rule" Bill, 205.
Occupational Tax Upheld by Court, 167.
Seeks Boost in Permit Fees, 125.
Seattle City Light:
Bids on Skagit Project, 34.
Largest Crane Goes to Diablo Dam, *168.
R.F.C. Loan Refused, Plans Bond Issue, 167.
Revises R.F.C. Application, 205.
Ross Dissatisfied With R.F.C. Proposal, 246.
Selling, The High Cost of, by Frank E. Boyd, 109.
Selsyns Provide Speed Control at Paper Mill, *74.
Silver Creek:
Asks R.F.C. Loan, 121.
Skagit Project: (See Seattle City Light.)
Soil Heating:
Display at Nurserymen's Convention, *205.
Sterilization of Soils Electrically, *239.
Southern California Edison Co. Ltd.:
Russell H. Ballard Dies, *118.
George C. Ward Named President, *211.
Harry J. Bauer Named Board Chairman, *211.
Just Plain Common Sense, by Harry J. Bauer and George C. Ward, *222.
Makes Power Offer to L.A.B.P. & L. 167.
Offers L.A.B.P. & L. Power Contract, 35.
Power Bureau Agreement Benefits Public, †219.
Secures Injunction on Wilmington Plant, 120.
Signs Contract With L.A.B.P. & L. to Abandon Wilmington Plant, 246.
Tulare Refuses Rate Cut, 36.
Southern Sierras Power Co.:
New-Type Chick Brooders, by J. C. Scott, *238.
Spokane:
Power District Plan Blocked, 119.
Sports Lighting:
Get Your Suntan While It Snows, *226.
Golf Course, San Francisco, by Elliott Conrey, *64.
Olympic Swimming Pool, (L.A.), *36.
Standardization:
Field for Is Not Exhausted, †133.
Sterilization of Soils Electrically Is Sure, 239.
Street Lighting:
Facts Prove Economies of Highway Lighting, †133.
Supervisory Control for 220-Kv. Station, *228.
Swope, Gerard:
Receives 1932 McGraw Medal, 214.

T

Taxes:
Business Can Be Taxed to Death, †3.
Idaho Kw.-Hr. Tax Nets Less Than Expected, 37.
National Electric Tax, 34.
Oregon Committee Studies Municipal Utility Tax, 247.
Puget Sound Power & Light Fights Seattle Occupation Tax, 79.
Rate Trends and Tax Trends, by John P. Coghlan, 94.
Seattle Campaigns for "Home Rule" Bill, 205.
Seattle Occupational Tax Upheld by Court, 167.
The Tumult and The Shouting Die, †180.
Theaters:
One Stage Serves Two, by D. S. Bowman, *102.
Tillamook Utility District: (See Oregon)
Tools:
Central Electric Co. Specializes, *24.
Trade Relations Is a Human Problem, by F. M. Banks, 156.
Transformers:
Dolly-Truck Facilities Movement of, *21.
Obsolesence of, by J. C. Henkle, *187.

U

Underfloor Duct:
Fiberduct Aids Building Planning, by R. C. Mixer, *192.
University of California:
An Opportunity for a Research Investment, †220.
Nation's Largest Precision Testing Machine, *121.
Utah Electrical League: (See Electrical League of Utah.)
Utah Power & Light Co.:
First-Aid Team Wins, *246.
Sales Contest Ends in an Outing, *201.
Utility Districts: (See Public Ownership.)
Utility Management—A Three-Phase Problem, by F. B. Lewis, 54.

V

Vallejo Electric Light & Power Co.:
New Substation Dedicated, *247.
Valley Electrical Supply Co.:
Sales Force 10 Times Larger, by H. H. Courtright, *150.

W

Ward, George C.:
Named Edison Co. President, *211.

Washington:
Power Districts Defeated, 244.
Significance of Elections, 244.
Welding, Electric:
Prizes in Lincoln Electric Co. Contest, *37.
Western Colorado Power Co.:
Rates Reduced, 119.
Westinghouse Electric & Mfg. Co.:
Adopts New Wholesaling Plan, 174.
Employee Campaign Extended, 38.
Employee Sales Campaign Ends, 80.
Wholesaling:
Whiskered Wholesaling, by Clyde Bedell, 1, 26.
Wilmington Steam Plant: (See Los Angeles Bureau of Power & Light.)
Window Displays:
A Knockout Window, *203.
Organizing of, *58.
These Windows Really Sell, *202.
Wiring: (See also Range Wiring and Electric Wiring)
Wiring: (continued)
Can Wiring Be Sold?, by A. E. Holloway, *158.
No Ordinances at Chicago Fair Grounds, 227.
Nothing Will Sell Wiring But Selling, †2.
San Francisco Revamps Ordinance, 42.
3-Phase, 4-Wire Costs Analyzed, by R. E. Lloyd, *224.

Personal

A

Allen, Frank L., *40; Allison, Charles W., 171; Anderson, Paul, 41; Arbogast, Glenn, 41.

B

Babcock, Allen, 170; Baker, Clark, *253; Ballard, Russell H., 40; Ballew, R. E. 83; Barry, James M., 170; Bartholomew, F. J., 40; Batty, W. R., 41; Bauer, Harry J., *211; Bear, W. P., 82; Bell, Edward H., 215; Bennett, O. W., 252; Bird, W. M., 82; Blood, Henry H., 244; Bost, Norman L., 171; Bowman, Sydney J., 41;Brainard, L. W., *252; Brandt, Effie M., 83; Brewer, C. M., 123; Brooke, H. F. B., 40; Brown, A. S., 212; Brown, Beulah, 82; Buck, Gaylord B., 253;Buratti, Carl, 41; Burnham, M. K., 83;Burrows, R. P., 214.

C

Campbell, George S., *171; Carroll, H. N., *211; Carroll, Harry, 208; Cassidy, M. E., 205; Chalmers, A. T., 40; Charlesworth, H. P., *171; Clampitt, William A., 212; Clark, T. C., 40; Clark, W. H., 82; Coffin, L. R., 123; Coghlan, J. P., 40; Collins, E. H., *252; Colwell, J. I., *212; Cornell, L. P., 83; Courtright, H. H., 253; Cox, H. H., 41; Crawford, Hugh, 40; Crosby, T. H., 40; Curtis, Kenneth, 82; Cutten, C. P., 83.

D

Dale, Bertha J., 82;Dalziel, C. F., 123; Davis, E. R., *41; Davis, Guy E., 170; Day, Addison B., 40, 253; Dazey, K. I., 214; Delehady, W. J., 82; Demuth, O. A., 171; Dobson, Harry V., *213; Doerr, Rodney, 82; Downing, P. M., 40, 208, *123.

E

Eakins, James M., 212; Edison, Charles, 41; Elliott, Arthur, *206.

F

Fawcus, Sydney C., 40; Field, M. D., 40; Fisher, R. E., *83, 208; Forrest, Wm., 83; Frickstad, I. C. 83; Frost, A. M., 208; Frost, W. L., 40, 208, 212; Fryklund, A. R., 123.

G

Gadsby, George M., 123; Gohl, E. F., 215; Griffith, Franklin T., *40; Gunther, R. A., 83; Guthrie, Stanley W., *171.

H

Halpenny, R. H., 41;Hammond, Edith, 82; Harper, Harry L., *82; Harper, H. L., 214; Hassmer, A. E., 83; Hawley, George N., 205; Heise, C. A., 214; Henderson, Frank S., 253; Hill, W. S., 252; Hillebrand, W. A., *83; Hillmer, J. W., 215; Hitchner, A. E., *41; Hodges, E. W., 83; Hoeft, Ella I., 82; Horn, Herbert H., *215; Horsfall, C. A., 41; Houston, Clyde E., *212; Howse, Paul D., 171.

J

Jermyn, Theresa F., 83; Johnston, W. D., 82; Jourdan, J. W., 170.

K

Keeler, C. G., 253; Kelly, A. T., 83; Kendrick, Mrs. Anne, 82; Kenyon, R. G., *212; King, R. B., 123; Kirkpatrick, C. W., 253; Koontz, J. A., 83.

L

Lamoree, C. D., 215; Loftus, J. J., 171; Lynn, Mary Caroline, 82.

M

Marshall, W. R., 40; Martin, Gov. Clarence D., 244; Martin, J. H., 83; Masser, Harry L., 171; Mayfield, J. M., 83; McArthur, J. W., 123; McCann, E. G., 83; McElroy, R. B., 252; McFadden, R. C., 208; Meldrum, J., 40; Merwin, L. T., 123; Miles, George, 41; Miller, J C., 40; Milliken, G. W., 41; Mitchell, Henry A., 82; Moon, Verne H., *170; Morris, J. M., 41; Mullendore, W. C., 40; Mulvaney, Fred A., 83; Munro, J. C., 40; Murphy, H. B., 83; Murray, Marvel, 82; Myers, Roy D., 215; Myrtle, F. S., 83.

N

Nicoll, Alfred H., *82; Nielsen, W. W., *83.

O

O'Connell, Daniel, 83.

P

Parkinson, B. H., *252; Patton, H. A., 83; Pazak, F. J., 83; Pence, Dave, 41; Perry, E. H., 212; Phythian, George F., 41;Pinkerton, H. L., 82; Plette, I. J., 83;Pollard, A. L., 171; Priestman, J., 40; Prietsch, Paul R., 215.

Q

Quinn, T. K., 215.

R

Ramsay, E. P., 41; Rarick, Verda, 82; Raymond, Forrest M., 253; Rees, Mrs. Jeanette I., 82; Reilly, Charles J., 215; Richarson, W. L., 171; Royer, J. E. E., *123; Rump, Charles, 253; Ryan, J. C., 123; Ryan, J. S., 83.

S

Sanders, W. K., 171; Sanford, C. M., 252; Scarfe, Stanley S., 82; Scott, A. J., 83; Scott, F. C., 41; Seim, O. P., 171; Sellars, F. W., 40; Sewall, Harry B., 82; Shannon, W. D., 171; Shea, R. D., 83; Sherwood, F. B., 83; Sinnott, Joseph, 123; Slack, Orson M., 253; Smith, Dave A., 41; Smith, Glenn D., *40; Smith, Richard E., *211 Smith, R. S., 40; Smith, Walter C., 40; Spaulding, W. H., 83; Stannard, Milton L., 41; Swope, Gerard, 214.

T

Thies, W. A., 171; Thomas, Frank S., 212; Thomas, R. F., 83; Thorburn, Clifford, 41; Thrane, Harold, 41; Tice, J. C., 83; Tickner, H. E., 83.

U

Ude, W. H., *252.

V

Veirs, D. H., 83; Vincent, Jr., W. F., 83.

W

Wade, Willard G., 41; Wallis, Edward J., *82; Walsh, Walter J., 123; Ward, George C., 170, *211; Warren, H. S., 41; Weems, Clyda, 82; Weiss, Frank, 40; Wells, Joe R., 41; Wise, Dorothy, 83; Wrenn, John, 82, 208; Wright, Ben. G., 41; Wright, George R., 40.

Y

Yelton, P. H., 253.

Z

Zimmerman, P. B., 215.

Obituary

Baily, George, *253; Butte, Paul, 123.

Cline, Walter B., 83.

Forsyth, Albert E., 212; Fuller, Bert F., 83.

Hendrie, Edwin Beard, 83; Hendry, W. R., 83; Hoffman, George D., 171.

Keller, George E., 212.

MacNeil, Francis, 41; McClain, Carl A., 123.

McLean, Thomas, 41; McKinstrey, F. D., 83.

Reed, Miss Agnes M., 212, Reed, Melvin I., 171, Robertson, A. J., 41.

Simmons, Harold T., 171.

Authors' Index

Page

A

Ashworth, P. P., and E. W. Hempel. Analyzing, Reducing and Correcting Distribution Losses, ...* 96

B

Banks, F. M. Trade Relations Is a Human Problem..... 156
Bauer, Harry J., and George C. Ward. Just Plain Common Sense,*222
Bedell, Clyde. Whiskered Wholesaling, ... 26
Bowman, D. S. One Stage Serves Two Theaters *102
Boyd, Frank E. And Now—The Dealer 196
The High Cost of Selling..... 109
Concluding Specifically *240
Bullard, W. R., E. F. Pearson, G. B. Shanklin and S. B. Clark. Crossing the Columbia at 115 Kv.....*182

C

Campbell, Geo. A. Looks at the Future *134
Clark, S. B., E. F. Pearson, G. B. Shanklin and W. R. Bullard. Crossing the Columbia at 115 Kv.....*182
Clark, W. N. The Industry Organizes to Sell One Million Ranges,..*157
Coghlan, John P. Rate Trends and Tax Trends..... 94
Report on N.E.L.A. Convention....* 16
Conrey, Elliott. Night Golf Grows Up ..... * 64
Courtright, H. H., and E. G. Stahl. "We've Made Our Sales Force 10 Times Larger" *151

D

Day, Addison B. Report on N.E.L.A. Convention .....* 16
Delehanty, W. J. Careful Planning Buys Adequacy at Low Cost.....*190
Downing, P. M. Looks at the Future *136
Report on N.E.L.A. Convention...* 17

F

Fisher, R. E. Looks at the Future..*134
Frost, W. L. The Industry Organizes to Sell One Million Ranges.....*157
Report on N.E.L.A. Convention..* 17

Page

G

Gardner, H. A. Cutting Dealers in on Load-Building Profits *152
Griffiith, F. T. Looks at the Future..*136

H

Hartley, Victor W. Is Lighting Neglected? *147
Hempel, E. W., and P. P. Ashworth. Analyzing, Reducing and Correcting Distribution Losses.....* 96
Henkle, J. C. Transformer Obsolescence *187
Hibbard, M. L. Looks at the Future *135
The Industry Organizes to Sell One Million Ranges *157
Hockenbeamer, A. F. Looks at the Future *135
Holloway, A. E. Can Wiring Be Sold? *158

I

Irion, A. D. Photography Aids in Deceleration Tests .....* 99

K

Kempton, Arthur, Voluntary Suburban Inspection Will Help..... 107
Kimball, G. E. Safety Orders Under Revision 32

L

Leurey, Louis F. Electrical Rates as Viewed by the Consumer..... 56
Lewis, Fred B. Looks at the Future *134
Utility Management—A Three-Phase Problem 54
Lindstrom, L. O. B. Electricity Drives an Auto Ferry.....* 76
Lloyd, R. E. Electrified Olympiad Breaks Timing Records..... 107
3-Phase, 4-Wire Costs Analyzed..*224
Luse, F. D. Load-Building Campaign With Range Units.....*146

M

Marshall, W. R. Report on N.E.L.A. Convention .....* 17
Mixer, R. C. Fiber Underfloor Duct Aids Building Planning.....*192
Moore, L. J. Engineering Unit Costs and Their Control.....* 18
Mullendore, William C. Report on N.E.L.A. Convention.....* 16

Page

N

Newmyer, W. R. Portable Unit for Farm Pumping Use.....*242

P

Pearson, E. F., G. B. Shanklin, W. R. Bullard and S. B. Clark. Crossing the Columbia at 115 Kv.....*182

R

Raber, Wm. F. Looks at the Future.*137
Ross, Ladner V. Spokane School Teaches All Industry a Lesson....* 62
Rowley, C. A. What to Tell the Architect 67
Rowley, R. E. Jr. Problems and Economies of Rebuilt Oil Switches.....*231

S

Scott, J. C. Remarkable Results From New-Type Chick Brooders..*238
Shanklin, G. B., E. F. Pearson, W. R. Bullard and S. B. Clark. Crossing the Columbia at 115 Kv.....*182
Stahl, E. G., and H. H. Courtright. "We've Made Our Sales Force 10 Times Larger".....*151
Stannard, Clare N. Looks at the Future *136
Surratt, J. P. Meter Studies Can Pay Dividends .....* 68

T

Talbot, Guy W. Looks at the Future *137
Thomas, Earl E. Cutting Costs by Raising Power Factor.....*108

W

Ward, George C., and Harry J. Bauer. Just Plain Common Sense.....*222
Weiss, Frank C. Report on N.E.L.A. Convention 17
West, A. B. Looks at the Future*137
Wilson, J. B. Looks at the Future..*137
Wishon, A. Emory. Looks at the Future *136